0069452

SAF-RC-001
Industrial Hygiene Sampling
FINAL DATA

NO DISTRIBUTION REQUIRED

COMMENTS:

SDG 06I-0662-02 SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete Partial

300 Area 333 Bldg

Cover Page

Report Identification Number: 06I-0662-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: R33300 J451
Payroll#: 73513

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
14 Feb 2006	J114K2	06I05254	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114K7	06I05255	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114W7	06I05256	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114W9	06I05257	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114X0	06I05258	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114K4	06I05259	NMAM 7300M	G061H013	G WIPE
14 Feb 2006	J114L2	06I05260	NMAM 7300M	G061H013	G WIPE

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Name: Lisa M. Reid
Title: Chemist
Date: February 17, 2006

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Case Narrative Page

Report Identification Number:	06I-0662-02
Subcontract Number:	0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist:	Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number:	DCHM
SAF#:	R33300 J451
Payroll#:	73513

General Set Information: There are 7 samples in set 05I-0662-02 that were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of ± 10%.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.02 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.1 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 3. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

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Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: One Laboratory Control Samples (LCS) and one Laboratory Control Sample Duplicates (LCSD) were prepared and analyzed with the sample batch. The LCS results were within the control limits of ± 20%. The Relative Percent Differences (RPDs) between the LCSs and the LCSDs were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the sample and the replicate was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:
Final result for aqueous samples (µg/sample) = (A) x (B) x (C)

Where:
A = Analyte concentration from instrument determination (µg/L)
B = Concentration factor from sample preparation
= Final Volume of Digestate (L) / Sample
C = Dilution performed at time of analysis

Example Calculation: (1 µg/L) x (0.025 L/sample) x (1) = 0.025 µg/sample

Miscellaneous Comments: None

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Report Page

Report Identification Number: 06I-0662-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF#: R33300 J451
Payroll#: 73513

Customer Sample Number	Laboratory Sample Number	Date Analyzed	Beryllium µg/sample		Cadmium µg/sample		Lead µg/sample	
J114K2	06I05254	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
J114K7	06I05255	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
J114W7	06I05256	16 Feb 2006	0.026		0.13		3.6	
J114W9	06I05257	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
J114X0	06I05258	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
J114K4	06I05259	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
J114L2	06I05260	16 Feb 2006	<0.02	U	<0.1	U	<3.	U
		Limit of Detection (LOD)	0.02		0.1		3.	
		Required Detection Limit (RDL)						

U - Parameter not detected above LOD.
J - Parameter between LOD and RDL.

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QC Summary Page

Report Identification Number: 06I-0662-02
Subcontract Number: 0000X-BO-G0058-B-Mod#4
Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby
Laboratory Identification Number: DCHM
SAF: R33300 J451
Payroll#: 73513

Batch ID: G061H013

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-241408-1	MB	Beryllium	µg/sample	ND	NA	NA	NA	NA
BL-241408-1	MB	Cadmium	µg/sample	ND	NA	NA	NA	NA
BL-241408-1	MB	Lead	µg/sample	ND	NA	NA	NA	NA
QC-241408-1	LCS	Beryllium	µg/sample	10.2	NA	10.0	102.	NA
QC-241408-1	LCS	Cadmium	µg/sample	27.3	NA	30.0	91.1	NA
QC-241408-1	LCS	Lead	µg/sample	83.5	NA	100.	83.5	NA
QD-241408-1	LCSD	Beryllium	µg/sample	10.3	10.2	10.0	103.	1.03
QD-241408-1	LCSD	Cadmium	µg/sample	27.9	27.3	30.0	92.9	1.94
QD-241408-1	LCSD	Lead	µg/sample	84.5	83.5	100.	84.5	1.19

MB - Method Blank
LCS - Laboratory Control Sample
LCSD - Laboratory Control Sample Duplicate
MS - Matrix Spike
MSD - Matrix Spike Duplicate
LD - Laboratory Duplicate

NA - Not Applicable
ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0
MS, MSD Percent Rec. = ((Result – Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS – LCSD|) / ((LCS + LCSD)/2.0)) * 100.
MS, MSD Relative Percent Diff. = ((|MS – MSD|) / ((MS+ MSD)/2.0)) * 100.
LD Relative Percent Diff. = ((|Parent – LD|) / ((Parent + LD)/2.0)) * 100

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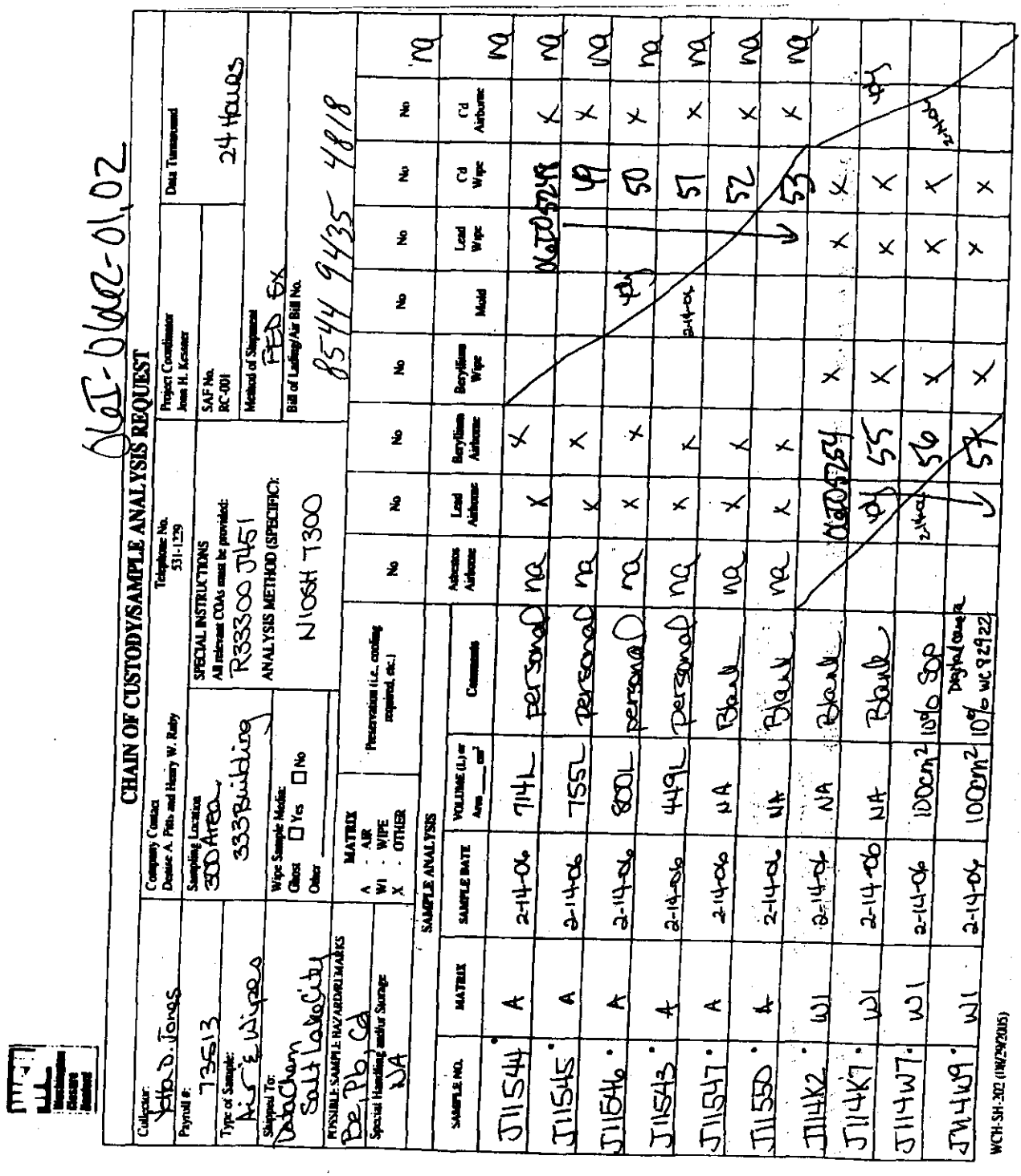
COC Page



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DATA CHEM LABORATORIES

COC Page

Enter on line below the first Sample Number from Page One:

J11544

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
[signature] John D Jones	2-14-06 1630	3746 [illegible] Rm 16, locked cabinet	2-14-06 1630
locked cabinet bldg 3746 Rm #16 Goldie Mathan Goldie Mathan	02-15-06 14:40	R2 Steffler R.J. Steffler	2-15-06 / 1450
R2 Steffler R.J. Steffler	WC4 2-15-06 / 1600	Fed Ex	
Fed Ex		Julie Noorata	2/16/06 1200
Metals 3JW			

LABORATORY SECTION	Received By	Title	DATE / TIME
	Julie Noorata		2/16/06 1200

REVIEWED BY: ______________ PRINT/SIGN NAME DATE: [illegible]

WCH-SH-202 (08/29/2005)

Page ___ of ___

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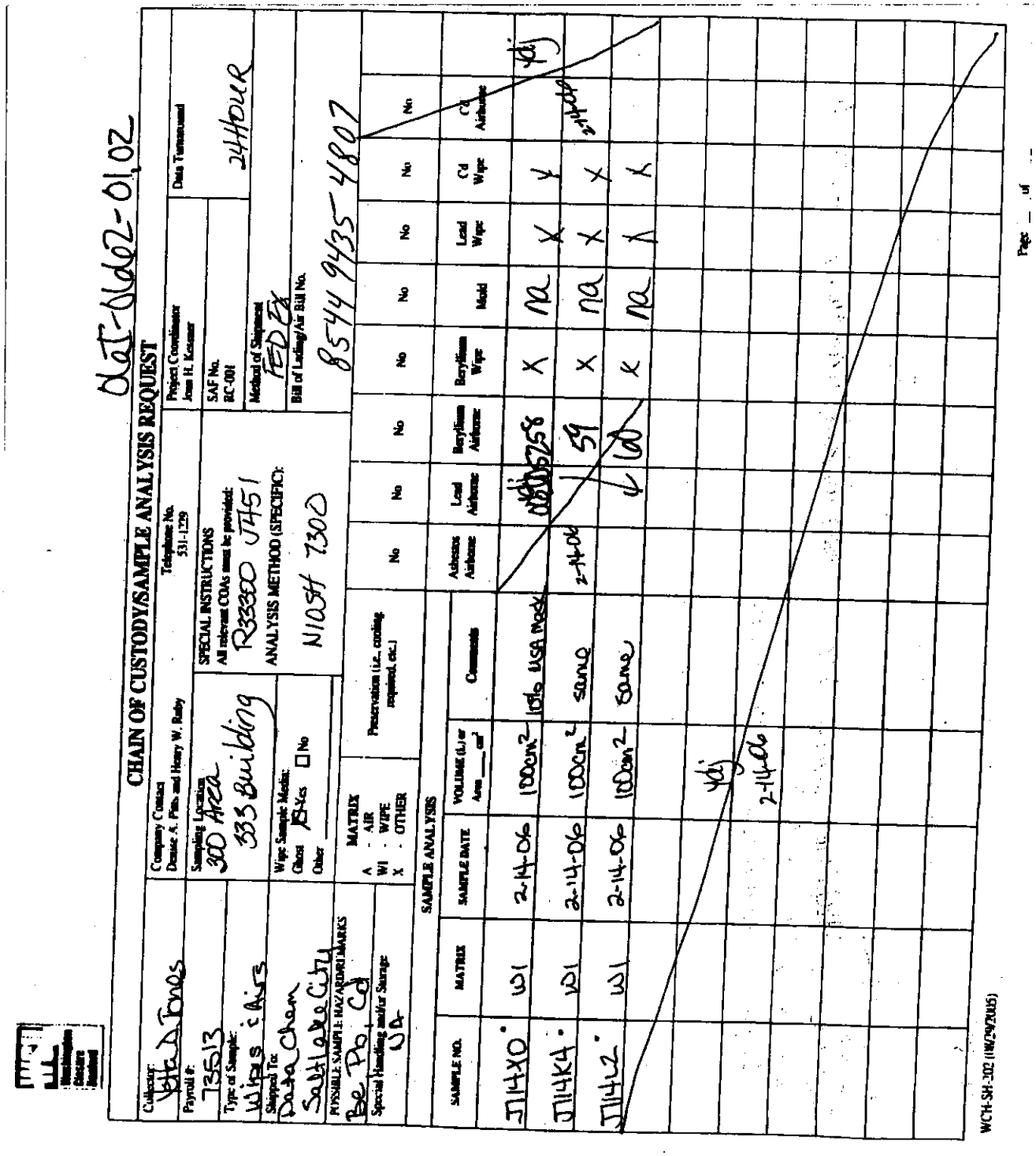
COC Page



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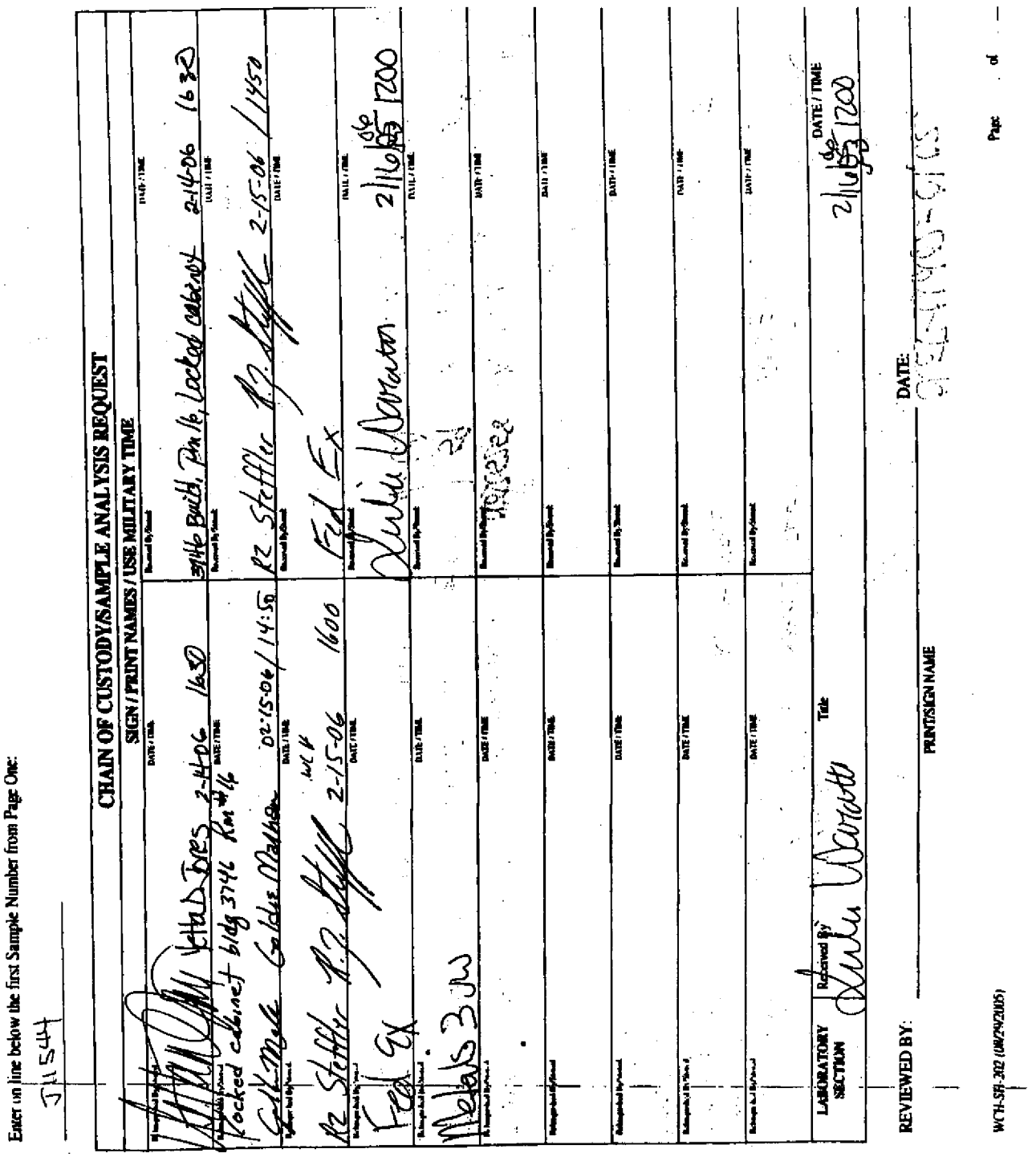

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Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Yetta D. Jones	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner
Payroll #: 73513	Sampling Location: 300 Area, 333 Building	SPECIAL INSTRUCTIONS: All relevant COAs must be provided: R33300 J451	SAF No.: RC-001
Type of Sample: Air & Wipes	Wipe Sample Media: Ghost ☐ Yes ☐ No; Other	ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: FED EX
Shipped To: DataChem Salt Lake City			Bill of Lading/Air Bill No.: 8544 9435 4818
POSSIBLE SAMPLE HAZARD/REMARKS: Be, Pb, Cd	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.):	Data Turnaround: 24 Hours
Special Handling and/or Storage: NA			

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
					No	No	No	No	No	No	No	No	na
J11544	A	2-14-06	714L	personal	na	X	X					X	na
J11545	A	2-14-06	755L	personal	na	X	X					X	na
J11546	A	2-14-06	800L	personal	na	X	X		ydj			X	na
J11543	A	2-14-06	449L	personal	na	X	X		2-14-06			X	na
J11547	A	2-14-06	NA	Blank	na	X	X					X	na
J11550	A	2-14-06	NA	Blank	na	X	X					X	na
J114K2	WI	2-14-06	NA	Blank				X		X	X		
J114K7	WI	2-14-06	NA	Blank		ydj		X		X	X	ydj	
J114W7	WI	2-14-06	100cm²	10% SOP		2-14-06		X		X	X	2-14-06	
J114W9	WI	2-14-06	100cm²	digital camera 10% WC82922				X		X	X		

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FIELD SAMPLE COPY

WCH-SH 202 (08/29/2005)

Enter on line below the first Sample Number from Page One:

J11544

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
Jetta D Jones	2-14-06 1630	3746 Build, Rm 16, locked cabinet	2-14-06 1630
Locked cabinet Bldg 3746 Rm #16			
Goldie Mathan	02:15:06 14:40	R2 Steffler R.J. Steffler	2-15-06 / 1450
R2 Steffler R.J. Steffler	WC4 2-15-06 / 1600	Fed Ex	

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: _____ DATE: _____

PRINT/SIGN NAME

Washington Closure Hanford

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

Collector: Vetta D. Jones	Company Contact: Denise A. Pitts and Henry W. Ruby	Telephone No.: 531-1229	Project Coordinator: Joan H. Kessner	Data Turnaround: 24 HOUR
Payroll #: 73513	Sampling Location: 300 Area 333 Building	SPECIAL INSTRUCTIONS All relevant COAs must be provided: R33300 J451	SAF No.: RC-001	
Type of Sample: Wipes & Airs	Wipe Sample Media: Ghost ☒ Yes ☐ No Other ____	ANALYSIS METHOD (SPECIFIC): NIOSH 7300	Method of Shipment: FED EX	
Shipped To: Data Chem Salt Lake City			Bill of Lading/Air Bill No.: 8544 9435 4807	
POSSIBLE SAMPLE HAZARD/REMARKS: Be, Pb, Cd	MATRIX: A - AIR; WI - WIPE; X - OTHER	Preservation (i.e., cooling required, etc.)		
Special Handling and/or Storage: VA				

SAMPLE ANALYSIS

SAMPLE NO.	MATRIX	SAMPLE DATE	VOLUME (L) or Area ____ cm²	Comments	Asbestos Airborne	Lead Airborne	Beryllium Airborne	Beryllium Wipe	Mold	Lead Wipe	Cd Wipe	Cd Airborne	
					No	No	No	No	No	No	No	No	
J114X0	WI	2-14-06	100cm²	10% USA mask		ydj		X	na	X	X		ydj
J114K4	WI	2-14-06	100cm²	same	2-14-06			X	na	X	X	2-14-06	
J114L2	WI	2-14-06	100cm²	same				X	na	X	X		
			ydj 2-14-06										

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J11544

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST

SIGN / PRINT NAMES / USE MILITARY TIME

Relinquished By/Signed	DATE / TIME	Received By/Signed	DATE / TIME
[signature] Vetta D Jones	2-14-06 1630	3746 Build, Rm 16, Locked cabinet	2-14-06 1630
Locked cabinet bldg 3746 Rm #16 [signature] Goldie Mathon	02-15-06 / 14:50	RZ Steffler [signature]	2-15-06 / 1450
RZ Steffler [signature]	wk 2-15-06 1600	Fed Ex	

LABORATORY SECTION	Received By	Title	DATE / TIME

REVIEWED BY: ______________________ DATE: ____________

PRINT/SIGN NAME